Attorney Docket: 46047/MOGUSDIV Serial No. 10/682,456

## AMENDMENTS TO THE CLAIMS

Claims 1-2 (cancelled)

Claim 3 (currently amended) Method for the inhibition of carbon flow in the glycolytic direction in a <u>plant</u> cell by increasing the intracellular availability of trehalose-6-phosphate <u>by</u> transformation of said plant cell with a vector comprising an antisense gene for trehalose-6-phosphate phosphatase (TPP), which upon expression is able to inhibit functional activity of the endogenous trehalose-6-phosphate phosphatase (TPP) gene.

Claim 4 (cancelled)

Claims 5-6 (withdrawn)

Claim 7 (cancelled)

Claim 8 (withdrawn)

Claims 9-20 (cancelled)

Claim 21-23 (cancelled)

Claims 24-33 (cancelled)

Claim 34 (currently amended) A cloning vector which comprises an antisense gene for [[TPP]] <u>trehalose-6-phosphate phosphatase (TPP)</u>, which upon expression is able to <u>prevent inhibit</u> functional activity of the endogenous [[TPP]] <u>trehalose-6-phosphate phosphatase (TPP)</u> gene <u>in a plant cell</u>.

Claim 35 (cancelled)

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Claim 36 (currently amended) Plant characterized in that it or one of its ancestors is transformed with a vector comprising the nucleotide sequence coding for an antisense gene [[of]] [[TPP]] for trehalose-6-phosphate phosphatase (TPP), which upon expression is able to inhibit functional activity of the endogenous trehalose-6-phosphate phosphatase (TPP) gene in a cell of

said plant, said plant still containing said nucleotide sequence antisense gene.

Claims 37-46 (cancelled)

Claims 46-47 (withdrawn)

Claims 49-98 (cancelled)

Claims 99-101 (withdrawn)

Claim 102 (new) Method for the inhibition of carbon flow in the glycolytic direction in a plant cell by increasing the intracellular availability of trehalose-6-phosphate by transformation of said plant cell with a vector comprising an antisense fragment of a trehalose-6-phosphate phosphatase (TPP) coding region, which upon expression is able to inhibit functional activity of the endogenous trehalose-6-phosphate phosphatase (TPP) gene.

Claim 103 (new) A cloning vector which comprises an antisense fragment of a trehalose-6-phosphate phosphatase (TPP) coding region, which upon expression is able to inhibit functional activity of the endogenous trehalose-6-phosphate phosphatase (TPP) gene in a plant cell.

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Claim 104 (new) Plant characterized in that it or one of its ancestors is transformed with a vector comprising an antisense fragment of a trehalose-6-phosphate phosphatase (TPP) coding region, which upon expression is able to inhibit functional activity of the endogenous trehalose-6-phosphate phosphatase (TPP) gene in a cell of said plant, said plant still containing said antisense fragment.

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